

Plot # _____

Species Identification

Species	Tally Marks	Density Total
Saguaros		
Prickly Pear		
Staghorn Cholla		
Desert Christmas Cactus		
Pincushion		
Ocotillo		
Hedgehog		
Fishhook Barrel		
Palo Verde		
Cresote Bush		
Heart-shaped Limber Bush		
Fairyduster		
Triangle Leaf Bursage		
Cat Claw Acacia		
Mesquite		
Unknown		

Soil Analysis:

Rope test:

Pick up a handful of soil. Add water so that you can squeeze a moist, but not muddy, one inch ball of soil in your hand. Then rub the soil between your fingers.

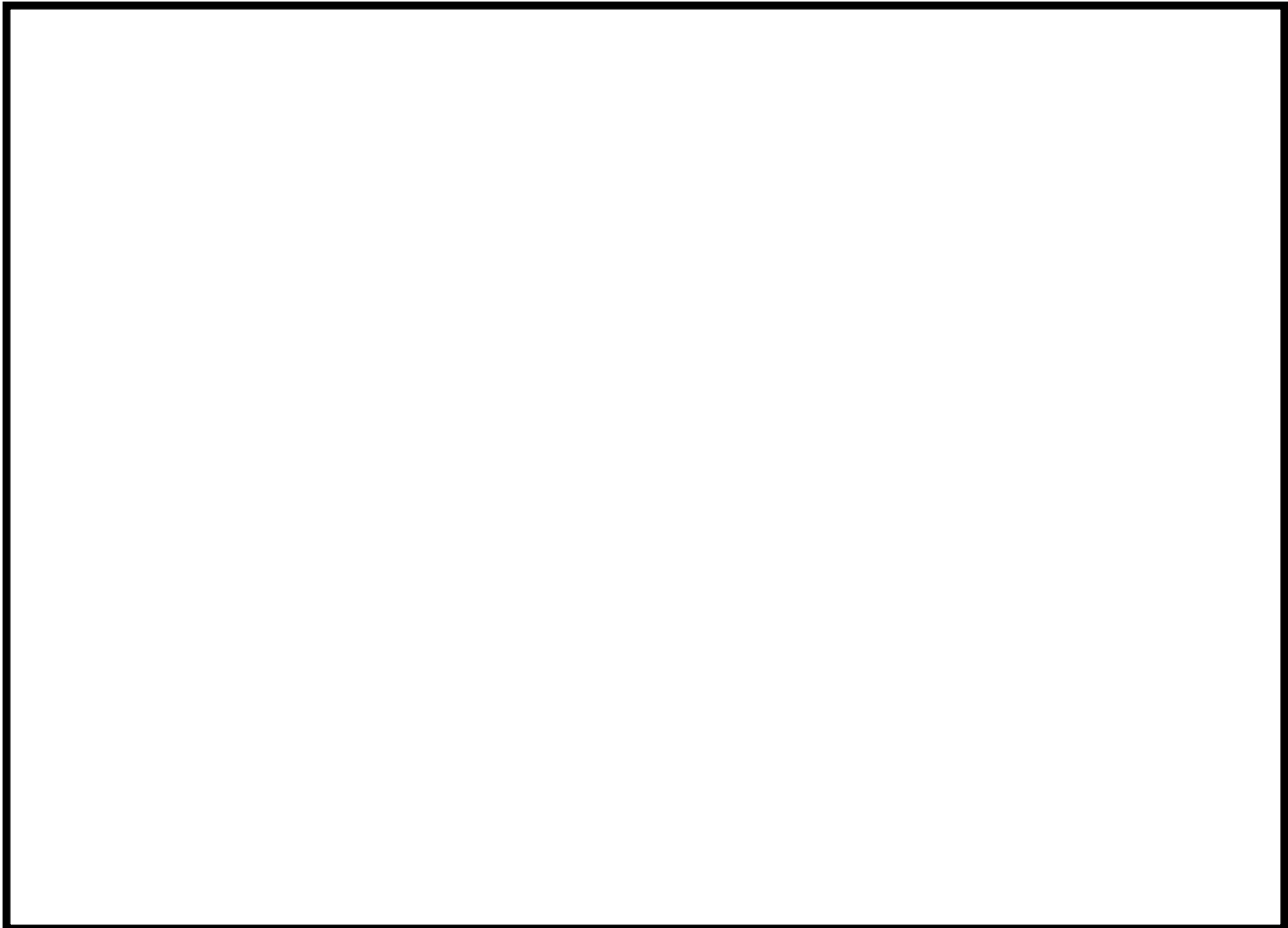
- Sandy soil feels gritty and loose. It won't form a ball and falls apart when rubbed between your fingers.
- Loam soil is smooth, slick, partially gritty and sticky and forms a ball that crumbles easily. It is a combination of sand and clay particles.
- Clay soil is smooth, sticky and somewhat plastic feeling. It forms ribbons when pressed between fingers.

Sky Island Science Investigators - Species, Slope, & Soil Field Class

Be as descriptive as possible in this section.

Question:	Analysis:
Is there a drainage channel in the plot? If so, show the location in your site plan below.	
Is the ground rocky? If there are rocks, are they small, medium or large, or a mixture? Describe the percentage of each.	
Are the annual plants covering the entire plot? Or are there bare spots?	
What type of soil is present in the plot? Use the rope test to determine if the soil is sandy, clay, or loam.	
Are there any animal disturbances, such as pack rat middens or animal holes in the ground? If so, show the location in your site plan below.	

Site Plan of Plot # _____

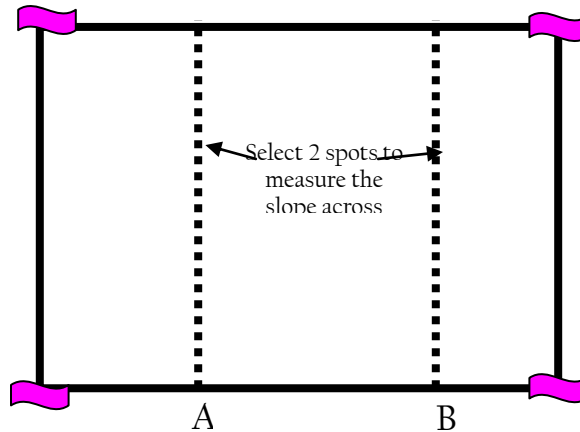


Slope Analysis

Slope = Rise over Run

To measure the slope:

- Select the spots where the difference in slope is to be measured. Indicate the locations you selected on the illustration below. Place one pole at each point.



- Measure the horizontal distance between the poles using a tape measure and level. This is the horizontal distance.
- Pull the string tight between the poles.
- On the pole that doesn't have the string attached to it, hold the loose end of the string at the same increment mark as on the other pole. Hold the level to the string, and slide the string up or down until the level indicates it is level. The distance the string had to be moved up or down is the difference in elevation change between the two points.
- Divide the change in elevation by the distance between the two poles. Then multiply that number by 100 to figure out the percent slope.

	Spot "A"	Spot "B"
Measure the <u>horizontal distance</u> between poles using a tape measure and level. Record the total number of inches.		
Distance the string had to be moved up or down from the starting point (<u>Elevation change</u>).		

Calculation: % slope = (change in elevation/horizontal distance) x 100

Don't forget to convert the inches back to feet before dividing by 100!

Spot A:

% slope = (_____ in inches) divided by _____ in inches) x 100

Spot B:

% slope = (_____ divided by _____) x 100